

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Austin White Lime Company, Ltd.

AUTHORIZING THE OPERATION OF
Austin White Lime Company
McNeil Plant and Quarry
Lime Manufacturing

LOCATED AT
Travis County, Texas
Latitude 30° 27' 21" Longitude 97° 43' 3"
Regulated Entity Number: RN100214337

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: 02866 Issuance Date: _____

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five-year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity

requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to

condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's

eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

- 4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

- A. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed no more than 25,000 gallons of gasoline in any calendar month after December 31, 2004, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
 - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. For the nonmetallic mineral processing operations specified in 40 CFR Part 60, Subpart OOO, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 60.670(f) (relating to Applicability and Designation of Affected Facility), for Table 1 for Subpart A
 - B. Title 40 CFR § 60.673(a) - (b) (relating to Reconstruction)
 - C. Title 40 CFR § 60.676(h) (relating to Reporting and Recordkeeping)
- 7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 8. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
 - A. Title 40 CFR § 63.11111(e), for records of monthly throughput

- B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
- C. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
- D. Title 40 CFR § 63.11115(a), for operation of the source
- E. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
- F. Title 40 CFR § 63.11116(b), for records availability
- G. Title 40 CFR § 63.11116(d), for portable gasoline containers

Additional Monitoring Requirements

9. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with either of the following requirements for any particulate matter capture system associated with the control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective action:
 - (i) Once per year the permit holder shall inspect any fan for proper operation and inspect the capture system used in compliance of CAM for cracks, holes, tears, and other defects; or
 - (ii) Once per year, the permit holder shall inspect for fugitive emissions escaping from the capture system in compliance of CAM by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.

- F. The permit holder shall comply with either of the following requirements for any bypass of the control device subject to CAM. If the results of the following inspections or monitoring indicate bypass of the control device, the permit holder shall promptly take necessary corrective actions and report a deviation:
- (i) Install a flow indicator that is capable of recording flow, at least once every fifteen minutes, immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - (ii) Once a month, the permit holder shall inspect the valves checking the position of the valves and the condition of the car seals. Identify all times when the car seal has been broken and the valve position has been changed to allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere.
- G. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the permits by rule identified in the PBR Supplemental Tables in the application), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit.

These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

14. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

15. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
16. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

- 17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair of fleet vehicle air conditioning using ozone-depleting refrigerants shall be conducted in accordance with 40 CFR Part 82, Subpart B. Permit holders shall ensure that repairs or refrigerant removal are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart B.

Permit Location

- 18. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

- 19. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary	14
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
ENGINE4	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPENGINE	SRIC ENGINES	ENGINE1, ENGINE2, ENGINE3	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPRK1&2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	RK288-1, RK288-2	R1151	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
GRPRK1&2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	RK288-1, RK288-2	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPSLDFUEL	COAL PREPARATION PLANT	RK300-1, RK300-2, RK300-3, RK300-4	60Y	40 CFR Part 60, Subpart Y	No changing attributes.
RK213	MINERAL PROCESSING PLANT	N/A	60HH	40 CFR Part 60, Subpart HH	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
ENGINE4	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.7 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j)	For each existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP, located at an area source, you must comply with the requirements as specified in Table 2d.7.a-c.	§ 63.6625(j) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(j) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GRPENGINE	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.7 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(j)	For each existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP, located at an area source, you must comply with the requirements as specified in Table 2d.7.a-c.	§ 63.6625(j) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(j) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GRPRK1&2	EP	R1151	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(b) § 111.151(c)	No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators).	** See CAM Summary	None	None
GRPRK1&2	EP	R1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six-minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See CAM Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPSLDFUEL	EU	60Y	PM (Opacity)	40 CFR Part 60, Subpart Y	§ 60.254(a) § 60.257(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(2) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	§ 60.258(c) § 60.258(d)
RK213	EU	60HH	PM	40 CFR Part 60, Subpart HH	§ 60.342(a)(1)	The owner or operator shall not allow the discharge of any gases which contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed.	§ 60.343(d) § 60.344(a) § 60.344(b) § 60.344(b)(1) § 60.344(b)(2) § 60.344(b)(3) ** See CAM Summary	None	None
RK213	EU	60HH	PM (Opacity)	40 CFR Part 60, Subpart HH	§ 60.342(a)(2)	The owner or operator shall not allow the discharge of any gases which exhibit greater than 15 percent opacity when exiting from a dry emission control device.	§ 60.343(b) § 60.343(e) § 60.344(a) § 60.344(b)(4) ** See CAM Summary	§ 60.343(b)	§ 60.343(e)

Additional Monitoring Requirements

Compliance Assurance Monitoring Summary	18
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CAM Summary

Unit/Group/Process Information	
ID No.: GRPRK1&2	
Control Device ID No.: WETSCR	Control Device Type: Wet scrubber
Control Device ID No.: WETSCR2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: Pressure drop below 18 inches H2O is a deviation.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 1 inch water gauge pressure (± 250 pascals); or ± 2% of span. 	

CAM Summary

Unit/Group/Process Information	
ID No.: GRPRK1&2	
Control Device ID No.: WETSCR	Control Device Type: Wet scrubber
Control Device ID No.: WETSCR2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: Calculated daily average liquid flow rate to the scrubber system is below 605 gallons/minute is a deviation.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 2% of span; or ± 5% of design liquid flow rate. 	

CAM Summary

Unit/Group/Process Information	
ID No.: GRPRK1&2	
Control Device ID No.: WETSCR	Control Device Type: Wet scrubber
Control Device ID No.: WETSCR2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: It shall be considered a deviation if the pressure drop is below 18 inches H2O.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 1 inch water gauge pressure (± 250 pascals); or ± 2% of span. 	

CAM Summary

Unit/Group/Process Information	
ID No.: GRPRK1&2	
Control Device ID No.: WETSCR	Control Device Type: Wet scrubber
Control Device ID No.: WETSCR2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: Calculated daily average liquid flow rate to the scrubber system is below 605 gallons/minute is a deviation.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 2% of span; or ± 5% of design liquid flow rate. 	

CAM Summary

Unit/Group/Process Information	
ID No.: RK213	
Control Device ID No.: RK217	Control Device Type: Fabric filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart HH	SOP Index No.: 60HH
Pollutant: PM	Main Standard: § 60.342(a)(1)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: It shall be considered a deviation if the pressure drop is not within the range between 3 to 10 inches H ₂ O except for during kiln slow fire and after a shutdown for preventive maintenance.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span. 	

CAM Summary

Unit/Group/Process Information	
ID No.: RK213	
Control Device ID No.: RK217	Control Device Type: Fabric filter
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart HH	SOP Index No.: 60HH
Pollutant: PM (Opacity)	Main Standard: § 60.342(a)(2)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: It shall be considered a deviation if the pressure drop is not within the range between 3 to 10 inches H ₂ O except for during kiln slow fire and after a shutdown for preventive maintenance.	
<p>CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span. 	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSLDFUEL	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y
Pollutant: PM (Opacity)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity = 20%	
Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation.	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRPRK1&2	RK288-1, RK288-2	40 CFR Part 60, Subpart HH	Facility constructed or modified prior to May 3, 1977.
GRPRK1&2	RK288-1, RK288-2	40 CFR Part 60, Subpart OOO	The facility commenced construction, modification, or reconstruction prior to August 31, 1983.
GRPTKQUAR	TANKAWLT, TANKQUAR-1	30 TAC Chapter 115, Storage of VOCs	Tank storing a VOC with a TVP less than 1.5 psia.
GRPTKQUAR	TANKAWLT, TANKQUAR-1	40 CFR Part 60, Subpart K	Storage vessel capacity is less than 151,412 liters (40,000 gallons).
GRPTKQUAR	TANKAWLT, TANKQUAR-1	40 CFR Part 60, Subpart Ka	Storage vessel capacity is less than 151,412 liters (40,000 gallons).
GRPTKQUAR	TANKAWLT, TANKQUAR-1	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters (19,813 gallons).
RK213	N/A	40 CFR Part 60, Subpart OOO	The facility commenced construction, modification, or reconstruction prior to August 31, 1983.
TANKGAS1	N/A	30 TAC Chapter 115, Storage of VOCs	A storage tank with storage capacity between 1,000 gallons and 25,000 gallons is exempt from the requirements of §115.112(c)(1) of this title if construction began before May 12, 1973.
TANKGAS1	N/A	40 CFR Part 60, Subpart K	Storage vessel capacity is less than 151,412 liters (40,000 gallons).
TANKGAS1	N/A	40 CFR Part 60, Subpart Ka	Storage vessel capacity is less than 151,412 liters (40,000 gallons).
TANKGAS1	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is less than 75 cubic meters (19,813 gallons).
TANKRACK	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Motor vehicle fuel dispensing facilities are exempt from the requirements of 30 TAC Chapter 115, Subchapter C, Division 1: Loading and Unloading.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit	29

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX114M3	Issuance Date: 12/03/2019
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 6629	Issuance Date: 12/03/2019
Authorization No.: 160974	Issuance Date: 05/13/2020
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.102	Version No./Date: 09/04/2000
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.374	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
ENGINE1	BULL GEAR ENGINE 1	106.511/09/04/2000
ENGINE2	BULL GEAR ENGINE 2	106.511/09/04/2000
ENGINE3	BULL GEAR ENGINE 3	106.511/09/04/2000
ENGINE4	BULL GEAR ENGINE 4	106.511/09/04/2000
RK213	ROTARY LIME KILN NO. 3	6629, PSDTX114M3
RK288-1	ROTARY LIME KILN NO. 1	6629, PSDTX114M3
RK288-2	ROTARY LIME KILN NO. 2	6629, PSDTX114M3
RK300-1	COAL STORAGE SYSTEM	6629, PSDTX114M3
RK300-2	KILN 1 SOLID FUEL PROCESSING & CONVEYING SYSTEM	6629, PSDTX114M3
RK300-3	KILN 2 SOLID FUEL PROCESSING & CONVEYING SYSTEM	6629, PSDTX114M3
RK300-4	KILN 3 SOLID FUEL PROCESSING & CONVEYING SYSTEM	6629, PSDTX114M3
TANKAWLT	DIESEL TANK # 1	6629, PSDTX114M3
TANKGAS1	GASOLINE TANK	106.473/09/04/2000
TANKQUAR-1	DIESEL TANK # 2	6629, PSDTX114M3
TANKRACK	FUEL UNLOADING RACK	6629, PSDTX114M3

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Appendix A

Acronym List 31

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 33

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
RK300	Coke and Coal Section Fugitives (6)	PM	0.05	0.10	9	9	9
		PM ₁₀	0.02	0.05			
		PM _{2.5}	<0.01	0.01			
C&S001A	Crushing and Screening 'A' Section Fugitives (6)	PM	8.28	8.67	12	33	None
		PM ₁₀	3.38	3.54			
		PM _{2.5}	1.69	1.77			
C&S001C	Crushing and Screening 'C' Section Fugitives (6)	PM	5.42	5.67	12	33	None
		PM ₁₀	2.19	2.30			
		PM _{2.5}	1.10	1.15			
RK107	Kiln Nos. 1 and 2 Dust Stockpile	PM	0.01	0.05	None	None	None
		PM ₁₀	<0.01	0.03			
		PM _{2.5}	<0.01	0.01			
RKS1&2	Kiln Nos. 1 and 2 Fugitives (6)	PM	0.17	0.76	None	None	None
		PM ₁₀	0.09	0.38			
		PM _{2.5}	0.04	0.19			
RKS3	Kiln No. 3 Stockpile Fugitives (6)	PM	0.09	0.37	None	None	None
		PM ₁₀	0.04	0.19			
		PM _{2.5}	0.02	0.09			
RK288	Kiln Nos. 1 and 2	NO _x	106.1	437.3	6, 7, 9, 28	9, 28, 33	9, 28
		SO ₂	117.8	485.5	6, 7, 8, 9	9, 28, 33	9, 28
		PM	48.2	198.9	6, 7, 9, 11, 28, 30	9, 28, 30, 33	9, 28
		PM ₁₀	48.2	198.9	6, 7, 9, 11, 28, 30	9, 28, 30, 33	9, 28
		PM _{2.5}	48.2	198.9	6, 7, 9, 11, 28, 30	9, 28, 30, 33	9, 28
		CO	44.1	181.8	6, 7, 9, 28	9, 28, 33	9, 28
		VOC	0.9	3.7	6, 7, 9, 28	9, 28, 33	9, 28

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
RK213	Kiln No. 3	NO _x	118.5	425.5	6, 7, 9, 28	9, 28, 33	9, 28
		SO ₂	28.5	102.3	6, 7, 8, 9	9, 28, 33	9, 28
		PM	13.5	48.6	6, 7, 9, 11, 28, 29	9, 28, 29, 33	9, 28
		PM ₁₀	13.5	48.6	6, 7, 9, 11, 28, 29	9, 28, 29, 33	9, 28
		PM _{2.5}	13.5	48.6	6, 7, 9, 11, 28, 29	9, 28, 29, 33	9, 28
		CO	38.3	137.9	6, 7, 9, 28	9, 28, 33	9, 28
		VOC	1.0	3.6	6, 7, 9, 28	9, 28, 33	9, 28
RK133	Kiln No. 1 Rejects Bin	PM	3.66	2.00	None	None	None
		PM ₁₀	3.66	2.00			
		PM _{2.5}	1.83	1.00			
RK233	Kiln No. 2 Rejects Bin	PM	3.66	2.00	None	None	None
		PM ₁₀	3.66	2.00			
		PM _{2.5}	1.83	1.00			
RK218	Kiln No. 3 Dust Bin	PM	0.17	0.75	None	None	None
		PM ₁₀	0.17	0.75			
		PM _{2.5}	0.04	0.19			
RK161	Wet Fines Bin	PM	0.13	0.55	None	None	None
		PM ₁₀	0.13	0.55			
		PM _{2.5}	0.06	0.27			
RK508	Product Tower	PM	1.03	4.51	None	None	None
		PM ₁₀	1.03	4.51			
		PM _{2.5}	0.26	1.13			
SK004	West Bin No. 4	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
SK005	West Bin No. 5	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			
RK528A	Quicklime Product Bin Nos. 1, 4, and 6	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK529A	Quicklime Product Bin Nos. 2, 5, and 7 and Reclaim Bin No. 3	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK532	Quicklime Product Bin No. 8	PM	0.06	0.26	None	None	None
		PM ₁₀	0.06	0.26			
		PM _{2.5}	0.02	0.07			
RK537	Off Spec Pebble Loadout	PM	9.17	1.37	None	None	None
		PM ₁₀	9.08	1.28			
		PM _{2.5}	4.51	0.61			
BP006	Pebble Bagging	PM	0.32	1.41	None	None	None
		PM ₁₀	0.32	1.41			
		PM _{2.5}	0.08	0.35			
PP015	Bulk Pulverizer	PM	0.13	0.56	None	None	None
		PM ₁₀	0.13	0.56			
		PM _{2.5}	0.03	0.14			
PP004DCL	Pulverizer Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK525DCL	Product Bin No. 1 Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK526DCL	Product Bin No. 2 Loadout	PM	0.09	0.39			

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM ₁₀	0.09	0.39	None	None	None
		PM _{2.5}	0.02	0.10			
RK528DCL	Product Bin No. 4 Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK529DCL	Product Bin No. 5 Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK530DCL	Product Bin No. 6 Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
RK531DCL	Product Bin No. 7 Loadout	PM	0.09	0.39	None	None	None
		PM ₁₀	0.09	0.39			
		PM _{2.5}	0.02	0.10			
P013	Pulverized Quicklime Bagger	PM	0.66	2.89	None	None	None
		PM ₁₀	0.66	2.89			
		PM _{2.5}	0.33	1.45			
HH586	Hydrate Bin Nos. 3, 4, 5, and 6	PM	0.47	2.06	None	None	None
		PM ₁₀	0.47	2.06			
		PM _{2.5}	0.12	0.52			
FD-001	East and West Silo Dust Collector Stack	PM	0.04	0.19	10, 32	10, 33	None
		PM ₁₀	0.04	0.19			
		PM _{2.5}	0.04	0.19			
FD-002	Roll Crusher Dust Collector Stack	PM	0.09	0.38	10, 32	10, 33	None
		PM ₁₀	0.09	0.38			
		PM _{2.5}	0.09	0.38			

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
FD-003	Feed Silo Dust Collector Stack	PM	0.09	0.38	10, 32	10, 33	None
		PM ₁₀	0.09	0.38			
		PM _{2.5}	0.09	0.38			
4113-2	Hydrator Primary Dust Collector Stack	PM	0.35	1.53	10, 31, 32	10, 31, 33	None
		PM ₁₀	0.35	1.53			
		PM _{2.5}	0.35	1.53			
4401-3	Hydrator Nuisance Dust Collector Stack	PM	0.50	2.17	10, 31, 32	10, 31, 33	None
		PM ₁₀	0.50	2.17			
		PM _{2.5}	0.50	2.17			
LBH36	Hydrate Loadout	PM	0.15	0.66	None	None	None
		PM ₁₀	0.15	0.66			
		PM _{2.5}	0.04	0.16			
BH033	Hydrate Baggers	PM	0.47	2.06	None	None	None
		PM ₁₀	0.47	2.06			
		PM _{2.5}	0.12	0.52			
SK001	West Bin No. 1	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			
SK002	West Bin No. 2	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			
SK003	West Bin No. 3	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			
RK217	Kiln No. 3 Dust Bin	PM	0.18	0.08	None	None	None
		PM ₁₀	0.18	0.08			
		PM _{2.5}	0.09	0.04			

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
LBH23	Hydrate Bin Nos. 1 and 2	PM	0.15	0.66	None	None	None
		PM ₁₀	0.15	0.66			
		PM _{2.5}	0.04	0.16			
RK223	Apron Conveyor	PM	0.26	1.13	None	None	None
		PM ₁₀	0.26	1.13			
		PM _{2.5}	0.06	0.28			
PP009	Pulverized Product Bin	PM	0.02	0.08	None	None	None
		PM ₁₀	0.02	0.08			
		PM _{2.5}	<0.01	0.02			
RK537A	Product Loading Blowback	PM	0.06	<0.01	None	None	None
		PM ₁₀	0.06	<0.01			
		PM _{2.5}	0.03	<0.01			
RK550	Product Loading	PM	1.83	1.26	None	None	None
		PM ₁₀	1.83	1.26			
		PM _{2.5}	0.92	0.63			
BH036	Hydrate Bagging	PM	<0.01	0.02	None	None	None
		PM ₁₀	<0.01	0.02			
		PM _{2.5}	<0.01	0.01			
LBH36-2	Hydrate Loading Spout	PM	0.31	0.96	None	None	None
		PM ₁₀	0.31	0.96			
		PM _{2.5}	0.15	0.48			
TANKAWLT	Diesel Storage Tank	VOC	0.06	0.01	None	None	None
TANKGAS	Gasoline Storage Tank	VOC	23.44	1.16	None	None	None
TANKQUAR	Quarry Diesel Storage Tank	VOC	0.06	<0.01	None	None	None
TANKQUAR2	Quarry Diesel Tank No. 2	VOC	0.06	<0.01	None	None	None
TANKRACK	Fuel Loading Rack	VOC	5.94	2.97	None	None	None
MSSFUG		PM	0.19	0.02	27	33	None

Major NSR Summary Table

Permit Numbers: 6629 and PSDTX114M3			Issuance Date: 12/03/2019				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY(4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Inherently Low Emitting (ILE) Planned Maintenance Activities (6)	PM ₁₀	0.09	0.01	27	33	None
		PM _{2.5}	0.014	0.001	27	33	None

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC: volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x: total oxides of nitrogen
 SO₂: sulfur dioxide
 PM: total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀: total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5}: particulate matter equal to or less than 2.5 microns in diameter
 CO: carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Planned maintenance, startup, and shutdown emissions are included.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Austin White Lime Company, Ltd.
Authorizing the Construction and Operation of
Lime Plant
Located at **Austin, Travis County, Texas**
Latitude 30° 27' 21" *Longitude* -97° 49' 32"

Permit: 6629 and PSDTX114

Amendment Date: December 3, 2019

Expiration Date: May 27, 2024



For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius	GLCmax = maximum (predicted) ground-level concentration
°F = Temperature in degrees Fahrenheit	gpm = gallon per minute
°K = Temperature in degrees Kelvin	gr/1000scf = grain per 1000 standard cubic feet
µg = microgram	gr/dscf = grain per dry standard cubic feet
µg/m ³ = microgram per cubic meter	H ₂ CO = formaldehyde
acfm = actual cubic feet per minute	H ₂ S = hydrogen sulfide
AMOC = alternate means of control	H ₂ SO ₄ = sulfuric acid
AOS = alternative operating scenario	HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
AP-42 = Air Pollutant Emission Factors, 5th edition	HC = hydrocarbons
APD = Air Permits Division	HCl = hydrochloric acid, hydrogen chloride
API = American Petroleum Institute	Hg = mercury
APWL = air pollutant watch list	HGB = Houston/Galveston/Brazoria
BPA = Beaumont/ Port Arthur	hp = horsepower
BACT = best available control technology	hr = hour
BAE = baseline actual emissions	IFR = internal floating roof tank
bbl = barrel	in H ₂ O = inches of water
bbl/day = barrel per day	in Hg = inches of mercury
bhp = brake horsepower	IR = infrared
BMP = best management practices	ISC3 = Industrial Source Complex, a dispersion model
Btu = British thermal unit	ISCST3 = Industrial Source Complex Short-Term, a dispersion model
Btu/scf = British thermal unit per standard cubic foot or feet	K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
CAA = Clean Air Act	LACT = lease automatic custody transfer
CAM = compliance-assurance monitoring	LAER = lowest achievable emission rate
CEMS = continuous emissions monitoring systems	lb = pound
cfm = cubic feet (per) minute	hp = horsepower
CFR = Code of Federal Regulations	hr = hour lb/day = pound per day
CN = customer ID number	lb/hr = pound per hour
CNG = compressed natural gas	lb/MMBtu = pound per million British thermal units
CO = carbon monoxide	LDAR = Leak Detection and Repair (Requirements)
COMS = continuous opacity monitoring system	LNG = liquefied natural gas
CPMS = continuous parametric monitoring system	LPG = liquefied petroleum gas
DFW = Dallas/ Fort Worth (Metroplex)	LT/D = long ton per day
DE = destruction efficiency	m = meter
DRE = destruction and removal efficiency	m ³ = cubic meter
dscf = dry standard cubic foot or feet	m/sec = meters per second
dscfm = dry standard cubic foot or feet per minute	MACT = maximum achievable control technology
ED = (TCEQ) Executive Director	MAERT = Maximum Allowable Emission Rate Table
EF = emissions factor	MERA = Modeling and Effects Review Applicability
EFR = external floating roof tank	mg = milligram
EGU = electric generating unit	mg/g = milligram per gram
EI = Emissions Inventory	mL = milliliter
ELP = El Paso	MMBtu = million British thermal units
EPA = (United States) Environmental Protection Agency	MMBtu/hr = million British thermal units per hour
EPN = emission point number	MSDS = material safety data sheet
ESL = effects screening level	MSS = maintenance, startup, and shutdown
ESP = electrostatic precipitator	MW = megawatt
FCAA = Federal Clean Air Act	NAAQS = National Ambient Air Quality Standards
FCCU = fluid catalytic cracking unit	NESHAP = National Emission Standards for Hazardous Air Pollutants
FID = flame ionization detector	NGL = natural gas liquids
FIN = facility identification number	NNSR = nonattainment new source review
ft = foot or feet	NO _x = total oxides of nitrogen
ft/sec = foot or feet per second	
g = gram	
gal/wk = gallon per week	
gal/yr = gallon per year	
GLC = ground level concentration	

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
PM₁₀ = total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO₂ = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 6629 and PSDTX114

Emission Limitations

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions such as operating schedule and maximum hours of operation specified in that attached table. In addition to the emissions from routine operations, this permit authorizes emissions from planned maintenance, startup, and shutdown (MSS) activities, and those emissions shall comply with the limits specified in the MAERT. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that are authorized by this permit.
2. A copy of this permit shall be kept at the plant site and made available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ) or any air pollution control agency.
3. In addition, the holder of this permit shall identify all equipment at the property that has the potential of emitting air contaminants. Permitted emission points shall be identified by the emission point numbering on the MAERT. Grandfathered or exempt facilities shall be identified by the emission point numbering used in the most recent emissions inventory submitted to the TCEQ.

Fuel Specifications

4. The only fuels authorized for Kiln Nos. 1, 2, and 3 are natural gas, coal, and petroleum coke.
5. The following sulfur limitations shall apply to authorized fuels:
 - A. Natural gas is limited to pipeline-quality, sweet natural gas containing no more than 0.25 grain of hydrogen sulfide and 5 grains of total sulfur per 100 dscf.
 - B. Petroleum coke is limited to a maximum sulfur content of 5.0 percent by weight as received.
 - C. Coal is limited to a maximum sulfur content of 2.0 percent by weight as received.
 - D. Use of any other fuel or any exceedance of the sulfur content limitations of any fuel will require an amendment to the permit.
6. The permit holder is authorized to fire any combination of natural gas, coal, and petroleum coke under the following conditions:
 - A. The maximum heat input does not exceed 85 million British thermal units per hour (MMBtu/hr) hourly average or 80 MMBtu/hr annual average for either Kiln No. 1 or 2.
 - B. The maximum heat input does not exceed 156 MMBtu/hr for Kiln No. 3.
 - C. The maximum heat input from petroleum coke does not exceed 60 percent for Kiln Nos. 1 and 2 and the maximum heat input from petroleum coke does not exceed 80 percent from Kiln No. 3.
7. Upon request by the Executive Director of the TCEQ or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel(s) utilized in this facility or shall allow air pollution control agency representatives to obtain a sample for analysis. If the holder of the permit provides a fuel sample to the agency, the permit holder may take a split sample for their own analysis.

8. The holder of this permit shall determine the total sulfur content, heating value (Btu/lb), and trace metal composition of the coal and petroleum coke to be fired. An analysis of the fuel shall be conducted every six months or with a change of vendors to insure the composition of the fuel has not increased above permit application representations.
 - A. Exceedance of the sulfur content limitations in these Special Conditions will require an amendment to the permit.
 - B. Trace metal composition shall be limited to the parts per million (ppm) concentrations listed below. Exceedances of these limitations will require an amendment to the permit:
 - (1) Vanadium at 2,400 ppm;
 - (2) Nickel at 500 ppm; and
 - (3) Chromium at 25 ppm.

Federal Applicability

9. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following: **(12/19)**
 - A. Subpart A - General Provisions;
 - B. Subpart HH - Lime Manufacturing Plants
 - C. Subpart OOO - Nonmetallic Mineral Processing Plants
 - D. Subpart Y – Coal Preparation Plants.

Opacity/Visible Emission Limitations

10. Opacity of emissions from the following baghouse stacks shall not exceed 5 percent, averaged over a six-minute period. The Demonstration of Continuous Compliance section of these Special Conditions requires a quarterly visible emissions determination to demonstrate compliance with the opacity limitations **(12/19)**

Table 1: Sources Subject to 5% Opacity Limitations

EPN	Source Name
FD-001	East and West Silo Dust Collector Stack
FD-002	Roll Crusher Dust Collector
FD-003	Feed Silo Dust Collector
4113-2	Hydrator Primary Dust Collector
4401-3	Hydrator Nuisance Dust Collector

11. Opacity of emissions from the lime kiln stacks shall not exceed 15 percent, as measured by EPA Method 9, averaged over a six-minute period, except for those periods described in Title 30 Texas Administrative Code § 111.111(a)(1)(E).

12. Additional controls shall be installed promptly and documented within one week of first observation if water sprays do not maintain the opacity at the Crushers to 15 percent or less and the opacity at all other sources for EPNs C&S001A and C&S001C (as listed in Appendix B of the application dated April 25, 2013) to 10 percent or less. To assure compliance with this limitation, visible emissions evaluations shall be made quarterly utilizing the following method:
 - A. A quarterly 1-minute visible emissions check of each source must be conducted in accordance with the following instructions and the check must be conducted while the affected source is in operation:
 - (1) The visible emissions check shall consist of a visual survey of each stack or process emission point over the test period to identify if there are visible emissions, other than condensed water vapor.
 - (2) The observer must be at a position that is at least 15 feet but not more 1,320 feet from the affected emission point, with the sun or other light source generally at the person's back.
 - (3) The observer need not be certified to conduct EPA Method 9 in Appendix A to 40 CFR Part 60, but must meet the training requirements as described in EPA Method 22 of Appendix A to 40 CFR Part 60.
 - B. If visible emissions are observed during any visible emissions check, a 6-minute test of opacity must be conducted and documented within 24 hours for that emission point using EPA Method 9 of Appendix A to 40 CFR Part 60.

Operational Limitations, Work Practices, and Plant Design

13. Baghouses (dust collectors), properly installed and in good working order shall control particulate matter emissions from the following sources: **(12/19)**

Table 2: Sources Controlled by Baghouses/Fabric Filters (Dust Collectors)

EPN	Source Name	Outlet grain loading (grains per dry standard cubic feet)
RK213	Kiln No. 3	0.01
RK223	Apron Conveyor for Kiln No. 3	0.01
RK508	Crushing and Screening Equipment for Kiln Nos. 1, 2, and 3, and Loadout Bins Nos. 9 and 10 with DCL Spouts	0.01
BP006	Pebble CaO Baggers (Nos. 1 and 2) and Bagging Area Fugitives	0.01
PP015	Pulverizer Area fugitives	0.01
PP004DCL	Pulverizer Loadout	0.01
PP009	Pulverized Product Bin	0.01
RK528A	Product Bin Nos. 1, 4, and 6	0.01

EPN	Source Name	Outlet grain loading (grains per dry standard cubic feet)
RK529A	Product Bin Nos. 2, 5, and 7 and Reclaim Bin No. 3	0.01
RK532	Product Bin No. 8	0.01
RK218	Kiln No. 3 Dust Bin	0.01
RK525DCL	Product Bin No. 1 Loadout	0.01
RK526DCL	Product Bin No. 2 Loadout	0.01
RK528DCL	Product Bin No. 4 Loadout	0.01
RK529DCL	Product Bin No. 5 Loadout	0.01
RK530DCL	Product Bin No. 6 Loadout	0.01
RK531DCL	Product Bin No. 7 Loadout	0.01
SK001	West Bin No. 1	0.01
SK002	West Bin No. 2	0.01
SK003	West Bin No. 3	0.01
SK004	West Bin No. 4	0.01
SK005	West Bin No. 5	0.01
HH586	Hydrate Bin Nos. 3, 4, 5, and 6	0.01
LBH23	Hydrate Bin Nos. 1 and 2	0.01
LBH36	Hydrate Bin Truck and Railcar Loadout	0.01
BH033	Hydrate Bagging Area	0.01
FD-001	East and West Silo	0.005
FD-002	Roll Crusher	0.005
FD-003	Feed Silo	0.005
4113-2	Hydrator Primary	0.005
4401-3	Hydrator Nuisance	0.005

Solid Fuel Handling

14. This permit authorizes the handling, transfer, and storage of petroleum coke and coal used as fuel in the kilns.
15. Coal and petroleum coke stockpiles and plant roads shall be sprayed with water and/or appropriate chemicals, as necessary, to control fugitive dust emissions.
16. Solid fuel conveying systems shall be covered to reduce wind-blown dust emissions. Crusher and transfer points shall be equipped with water sprays to minimize fugitive dust emissions.

Limestone Handling

17. Limestone conveyors shall be sprayed with water and/or appropriate chemicals, as necessary, to control fugitive dust emissions.
18. The A and C Crushing and Screening Sections (Emission Point Numbers [EPNs] C&S001A and C&S001C) shall be controlled with water sprays, as necessary, to minimize fugitive dust emissions.

Kiln Nos. 1, 2, and 3 Operation

19. The production capacity of Kiln Nos. 1 and 2 is limited to 240 tons of quicklime (CaO) per kiln per day. The production capacity of Kiln No. 3 is limited to 650 tons of CaO per kiln per day.
20. Kiln No. 3 will exhaust to eight different stacks. For this permit, EPN RK213 will represent the combined emissions from the eight Stacks (RK213-N1, RK213-N2, RK213-N3, RK213-N4, RK213-S1, RK213-S2, RK213-S3, and RK213-S4).
21. The kilns shall be controlled as follows: **(11/18)**
 - A. Kiln No. 3 shall be controlled with a cyclone and baghouse operating in series to control particulate emissions.
 - (1) Disposal of particulate collected in the baghouses must be accomplished in such a manner which will prevent particulate matter from becoming airborne. During periods when Kiln No. 3 is shut down, all filter bags shall be inspected for wear. Torn or leaking baghouse filter bags shall be repaired or replaced immediately.
 - B. Kiln Nos. 1 and 2 each shall be controlled with a cyclone and wet scrubber operating in series before exhausting through a common stack.

Product Handling and Hydrator

22. All accidental spills of lime shall be minimized to reduce fugitive dust emissions.
23. The Lime Hydrator shall be limited to a feed rate of 30 tons per hour of lime. **(12/19)**

Planned Maintenance, Startup, and Shutdown

24. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility.
25. Emissions during planned startup and shutdown activities of the kiln shall be minimized as follows:
 - A. A planned startup of the kiln is defined as the period starting when the kiln's induced draft fan is turned on and fuel is fired in the main burner and ending when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 5 tons per hour (tph) for Kiln Nos. 1 or 2, or 28 tph for Kiln No. 3, whichever occurs first.

- B. A planned shutdown of the kiln is defined as the period starting when feed to the kiln is halted and ending when continuous kiln rotation ceases. A planned shutdown of the kiln is limited to 48 hours.
 - C. Fuel fired during a planned startup of the kiln shall be limited to natural gas only.
26. The emissions from Inherently Low Emitting (ILE) planned maintenance activities identified in Attachment A of this permit shall be complied with as follows:
- A. The total emissions from all ILE planned maintenance activities shall be no more than the estimated potential to emit for those activities as represented in the MSS permit amendment application and subsequent associated submittals.
 - B. The permit holder shall annually confirm the continued validity of the estimated potential to emit as represented in the MSS permit amendment application and subsequent associated submittals.
27. Emissions from planned MSS activities authorized by this permit shall be determined by the use of an appropriate method, including but not limited to any of following methods:
- A. Use of a continuous emissions monitoring system (CEMS). The CEMS shall be certified to measure the pollutant's emission over the entire range of a planned maintenance activity.
 - B. Use of emission factors, including but not limited to, facility-specific parameters, manufacturer's emission factors, and/or engineering knowledge of the facility's operations.
 - C. Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on an identical or similar facility, and correlation of that data with the facility's relevant operating parameters, including but not limited to, temperature, fuel input, and fuel sulfur content.
 - D. Use of emissions testing data collected during a planned maintenance activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including but not limited to, temperature, fuel input, and fuel sulfur content.

Demonstration of Continuous Compliance

28. Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance. Sampling must be conducted in accordance with the TCEQ Guidelines for Stack Sampling Facilities and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.
29. The permit holder shall install, calibrate, and maintain a device to monitor pressure drop across the Kiln No. 3 baghouse. The pressure drop shall be maintained between 3 to 10 inches water column except for during kiln slow fire and after a preventative maintenance shutdown. The monitoring device shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 0.5

percent. Pressure drop readings shall be recorded at least once per day that the system is operated. Filter bags shall be replaced whenever the pressure drop across the filter bags no longer meets the range specified above. Records of filter replacements shall be maintained. **(12/19)**

30. The permit holder shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of pressure loss of the gas stream through the Kiln Nos. 1 and 2 Scrubbers (EPN RK288). The monitoring device shall be calibrated at least annually in accordance with the manufacturer's specifications and must be accurate within one inch of water or a span of ± 2 percent. Scrubber pressure drop shall not fall below 18 inches of water while exhaust gases from Kiln Nos. 1 or 2 are routed to their respective scrubber. Pressure drop readings shall be recorded at least once per day that the system is operated.

The liquid flow rate to the Scrubber System shall be calculated and recorded on a daily basis (when the system is operated) using the height of the water over the weir plate. The height of the water over the weir plate and the result of the liquid volume flow rate calculation shall be logged on a daily basis. The calculated daily average liquid flow rate to the scrubber system shall not fall below 605 gallons/minute on days when the Kilns are operational. **(12/19)**

31. The following requirements apply to the Hydrator Primary Dust Collector (EPN 4113-2) and the Hydrator Nuisance Dust Collector (EPN 4401-3): **(12/19)**
- A. Each baghouse (dust collector) shall be operated and maintained in accordance with the manufacturer's recommendations to assure that the minimum control efficiency is met at all times when the controlled source is operated.
 - B. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge to monitor pressure drop across each baghouse. If the differential pressure gauge requires calibration, it shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range of ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 3 percent. If the differential pressure gauge is required to be zeroed, it shall be zeroed at least once a week.
 - C. Each baghouse differential pressure drop shall be maintained within the operating range specified by the manufacturer. If the pressure drop readings for the each baghouse cannot be maintained within the manufacturer's specified operating range, the holder of this permit shall take appropriate corrective action to cause the pressure drop readings to be within the manufacturer's specified operating range, or if that cannot be accomplished, replace appropriate bags in the baghouse.
 - D. Pressure drop readings for each baghouse shall be recorded at least once daily.
 - E. Corrective action for each baghouse, including filter replacement, shall be performed only when the controlled source is not in operation.
32. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the opacity limitations specified in this permit for the following baghouse (dust collector) stacks: **(12/19)**

Table 3: Sources Subject to Quarterly Visible Emissions Determination

EPN	Source Name
FD-001	East and West Silo Dust Collector Stack

EPN	Source Name
FD-002	Roll Crusher Dust Collector
FD-003	Feed Silo Dust Collector
4113-2	Hydrator Primary Dust Collector
4401-3	Hydrator Nuisance Dust Collector

This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), and 5) at least two stack heights, but not more than five stack heights, from the emission point. If visible emissions are observed from the emission point, the owner or operator shall:

- A. Take immediate action to eliminate visible emissions, record the corrective action within 24 hours, and comply with any applicable requirements in 30 Texas Administrative Code (TAC) § 101.201, Emissions Event Reporting and Recordkeeping Requirements; or
- B. Determine opacity using 40 CFR Part 60, Appendix A, Test Method 9. If the opacity limit is exceeded, take immediate action (as appropriate) to reduce opacity to within the permitted limit, record the corrective action within 24 hours, and comply with applicable requirements in 30 TAC § 101.201, Emissions Event Reporting and Recordkeeping Requirements.

Recordkeeping Requirements

- 33. The holder of this permit shall keep the following records on-site in a format suitable for inspection for a period of five years and shall be made immediately available upon request, during normal business hours, to designated representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction: **(12/19)**
 - A. The quantity of natural gas (million cubic feet), coal (pounds), and petroleum coke (pounds) fired in Kiln Nos. 1, 2, and 3 each per day.
 - B. For each occurrence of split-firing, indicate the percent of the total heat-input (on a MMBtu/hr basis) contributed by the above fuels. Note the date and duration of each occurrence.
 - C. The weight percent of sulfur in a typical sample of coal and petroleum coke received and used as fuel. A certified sulfur analysis performed by the fuel supplier will be acceptable.
 - D. Daily records of the quantity of coal and petroleum coke delivered to the plant.
 - E. Calculations using the emission factors determined by the most recent stack test and the compliance with the hourly emission rates in the MAERT. Also, calculations to show compliance with the annual emission limits in the MAERT for each kiln.
 - F. The quantity of lime (tons) produced per day.
 - G. The quantity of lime (expressed as tons) fed to the hydrator on a daily basis.
 - H. The total transfer of lime (expressed as tons) from all product bins to tanker or railcar on a daily basis.
 - I. Records of visible emissions and/or opacity observations and any corrective actions taken.

- J. All monitoring data and support information as specified in 30 TAC § 122.144.
- K. Records of pressure drop readings, calibrations, filter bag replacements, and filter bag performance specifications as required for Kiln No. 3.
- L. Records of pressure drop readings, calibrations, and liquid flow rate calculations as required for Kiln Nos. 1 and 2.
- M. Records of planned MSS, including the following, to demonstrate compliance with Planned Maintenance, Startup and Shutdown requirements and the MAERT:
 - (1) Records of startup and shutdown of the kilns, including the date, time, duration, and emissions associated with those activities.
 - (2) Records of ILE planned maintenance activities and annual validations.

Date: December 3, 2019

Attachment A

Permit Numbers 6629 and PSDTX114

Inherently Low Emitting Maintenance Activities

Planned Maintenance Activity	VOC	NO_x	CO	PM	SO₂
Material handling system maintenance				x	
Kiln refractory replacement				x	
Baghouse maintenance activities				x	
Miscellaneous equipment maintenance, including but not limited to, elevator, preheater, load-out bin, ball mill, hydrate Raymond mill, cooler bin, and miscellaneous spillage/cleanout pile maintenance				x	

Date: May 27, 2014

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 6629 and PSDTX114

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
RK300	Coke and Coal Section Fugitives (6)	PM	0.05	0.10
		PM ₁₀	0.02	0.05
		PM _{2.5}	<0.01	0.01
C&S001A	Crushing and Screening 'A' Section Fugitives (6)	PM	8.28	8.67
		PM ₁₀	3.38	3.54
		PM _{2.5}	1.69	1.77
C&S001C	Crushing and Screening 'C' Section Fugitives (6)	PM	5.42	5.67
		PM ₁₀	2.19	2.30
		PM _{2.5}	1.10	1.15
RK107	Kiln Nos. 1 and 2 Dust Stockpile (6)	PM	0.01	0.05
		PM ₁₀	<0.01	0.03
		PM _{2.5}	<0.01	0.01
RKS1&2	Kiln Nos. 1 and 2 Fugitives (6)	PM	0.17	0.76
		PM ₁₀	0.09	0.38
		PM _{2.5}	0.04	0.19
RKS3	Kiln No. 3 Stockpile Fugitives (6)	PM	0.09	0.37
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.02	0.09
RK288	Kiln Nos. 1 and 2 Cyclone and Wet Scrubber Stack	NO _x	106.10	437.30
		SO ₂	117.80	485.50
		PM	48.20	198.90
		PM ₁₀	48.20	198.90
		PM _{2.5}	48.20	198.90
		CO	44.10	181.80
		VOC	0.90	3.70

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
RK213	Kiln No. 3 Baghouse Stack	NO _x	118.50	425.50
		SO ₂	28.50	102.30
		PM	13.50	48.60
		PM ₁₀	13.50	48.60
		PM _{2.5}	13.50	48.60
		CO	38.30	137.90
		VOC	1.00	3.60
RK133	Kiln No. 1 Rejects Bin (6)	PM	3.66	2.00
		PM ₁₀	3.66	2.00
		PM _{2.5}	1.83	1.00
RK233	Kiln No. 2 Rejects Bin (6)	PM	3.66	2.00
		PM ₁₀	3.66	2.00
		PM _{2.5}	1.83	1.00
RK218	Kiln No. 3 Dust Bin Dust Collector Stack	PM	0.17	0.75
		PM ₁₀	0.17	0.75
		PM _{2.5}	0.04	0.19
RK161	Wet Fines Bin (6)	PM	0.13	0.55
		PM ₁₀	0.13	0.55
		PM _{2.5}	0.06	0.27
RK508	Product Tower Dust Collector Stack	PM	1.03	4.51
		PM ₁₀	1.03	4.51
		PM _{2.5}	0.26	1.13
SK004	West Bin No. 4 Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
SK005	West Bin No. 5 Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
RK528A		PM	0.09	0.39

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
	Quicklime Product Bin Nos. 1, 4, and 6 Dust Collector Stack	PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK529A	Quicklime Product Bin Nos. 2, 5, and 7 and Reclaim Bin No. 3 Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK532	Quicklime Product Bin No. 8 Dust Collector Stack	PM	0.06	0.26
		PM ₁₀	0.06	0.26
		PM _{2.5}	0.02	0.07
RK537	Off Spec Pebble Loadout (6)	PM	9.17	1.37
		PM ₁₀	9.08	1.28
		PM _{2.5}	4.51	0.61
BP006	Pebble Bagging Dust Collector Stack	PM	0.32	1.41
		PM ₁₀	0.32	1.41
		PM _{2.5}	0.08	0.35
PP015	Bulk Pulverizer Dust Collector Stack	PM	0.13	0.56
		PM ₁₀	0.13	0.56
		PM _{2.5}	0.03	0.14
PP004DCL	Pulverizer Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK525DCL	Product Bin No. 1 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK526DCL	Product Bin No. 2 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK528DCL	Product Bin No. 4 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
		PM _{2.5}	0.02	0.10
RK529DCL	Product Bin No. 5 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK530DCL	Product Bin No. 6 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
RK531DCL	Product Bin No. 7 Loadout Dust Collector Stack	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.02	0.10
P013	Pulverized Quicklime Bagger (6)	PM	0.66	2.89
		PM ₁₀	0.66	2.89
		PM _{2.5}	0.33	1.45
HH586	Hydrate Bin Nos. 3, 4, 5, and 6 Dust Collector Stack	PM	0.47	2.06
		PM ₁₀	0.47	2.06
		PM _{2.5}	0.12	0.52
FD-001	East and West Silo Dust Collector Stack	PM	0.04	0.19
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.04	0.19
FD-002	Roll Crusher Dust Collector Stack	PM	0.09	0.38
		PM ₁₀	0.09	0.38
		PM _{2.5}	0.09	0.38
FD-003	Feed Silo Dust Collector Stack	PM	0.09	0.38
		PM ₁₀	0.09	0.38
		PM _{2.5}	0.09	0.38
4113-2	Hydrator Primary Dust Collector Stack	PM	0.35	1.53
		PM ₁₀	0.35	1.53

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
		PM _{2.5}	0.35	1.53
4401-3	Hydrator Nuisance Dust Collector Stack	PM	0.50	2.17
		PM ₁₀	0.50	2.17
		PM _{2.5}	0.50	2.17
LBH36	Hydrate Loadout Dust Collector Stack	PM	0.15	0.66
		PM ₁₀	0.15	0.66
		PM _{2.5}	0.04	0.16
BH033	Hydrate Baggers Dust Collector Stack	PM	0.47	2.06
		PM ₁₀	0.47	2.06
		PM _{2.5}	0.12	0.52
SK001	West Bin No. 1 Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
SK002	West Bin No. 2 Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
SK003	West Bin No. 3 Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
RK217	Kiln No. 3 Dust Bin (6)	PM	0.18	0.08
		PM ₁₀	0.18	0.08
		PM _{2.5}	0.09	0.04
LBH23	Hydrate Bin Nos. 1 and 2 Dust Collector Stack	PM	0.15	0.66
		PM ₁₀	0.15	0.66
		PM _{2.5}	0.04	0.16
RK223	Apron Conveyor Dust Collector Stack	PM	0.26	1.13
		PM ₁₀	0.26	1.13
		PM _{2.5}	0.06	0.28

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
PP009	Pulverized Product Bin Dust Collector Stack	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	<0.01	0.02
RK537A	Product Loading Blowback (6)	PM	0.06	<0.01
		PM ₁₀	0.06	<0.01
		PM _{2.5}	0.03	<0.01
RK550	Product Loading (6)	PM	1.83	1.26
		PM ₁₀	1.83	1.26
		PM _{2.5}	0.92	0.63
BH036	Hydrate Bagging (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.02
		PM _{2.5}	<0.01	0.01
LBH36-2	Hydrate Loading Spout (6)	PM	0.31	0.96
		PM ₁₀	0.31	0.96
		PM _{2.5}	0.15	0.48
TANKAWLT	Diesel Storage Tank	VOC	0.06	0.01
TANKGAS	Gasoline Storage Tank	VOC	23.44	1.16
TANKQUAR	Quarry Diesel Storage Tank	VOC	0.06	<0.01
TANKQUAR2	Quarry Diesel Tank No. 2	VOC	0.06	<0.01
TANKRACK	Fuel Loading Rack	VOC	5.94	2.97
MSSFUG	Inherently Low Emitting (ILE) Planned Maintenance Activities (6)	PM	0.19	0.02
		PM ₁₀	0.09	0.01
		PM _{2.5}	0.014	0.001

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide

Emission Sources - Maximum Allowable Emission Rates

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned maintenance, startup, and shutdown emissions are included.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: December 3, 2019